

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A music reproduction system comprising:
an operating terminal unit that can be carried by an operator, and generates motion information in response to motion of the operator carrying said operating terminal unit;
a music editing apparatus that receives the motion information from said operating terminal unit and edits music data of a piece of music to be reproduced based on the received motion information; and
a musical tone generating device that reproduces the edited music data supplied from said music editing apparatus to generate musical tones;
wherein
said music editing apparatus comprises:
a detector device that detects peak information indicative of magnitude of the motion in a predetermined direction of the operator from the received motion information;
a control information generating device that generates music reproduction control information for controlling music reproduction of the piece of music, based on the peak information, when a peak value indicated by the peak information is larger than a first predetermined threshold value and a second predetermined threshold value, and

generates acoustic effect control information for controlling at least one acoustic effect to be applied to the piece of music, based on the peak information, when the peak value indicated by the peak information is larger than the first predetermined threshold value and smaller than the second predetermined threshold value;

a music data editing device that edits the music data based on the music reproduction control information and the acoustic effect control information generated by said control information generating device; and

an output device that outputs the music data edited by said music data editing device to said musical tone-generating device.

2. (Currently Amended) A music editing system comprising:

an operating terminal unit that can be carried by an operator, and generates motion information in response to motion of the operator carrying said operating terminal unit; and

a music editing apparatus that receives the motion information from said operating terminal unit and edits music data of a piece of music to be reproduced based on the received motion information;

wherein

said music editing apparatus comprises:

a detector device that detects peak information indicative of magnitude of the motion in a predetermined direction of the operator from the received motion information;

a control information generating device that generates music reproduction control information for controlling music reproduction of the piece of music, based on the peak

information, when a peak value indicated by the peak information is larger than a first predetermined threshold value and a second predetermined threshold value, and generates acoustic effect control information for controlling at least one acoustic effect to be applied to the piece of music, based on the peak information, when the peak value indicated by the peak information is larger than the first predetermined threshold value and smaller than the second predetermined threshold value; and

a music data editing device that edits the music data based on the music reproduction control information and the acoustic effect control information generated by said control information generating device.

3. (Currently Amended) A music editing apparatus comprising:

a receiver device that receives, from an operating terminal unit that can be carried by an operator, motion information generated in response to motion of the operator carrying the operating terminal unit;

a detector device that detects peak information indicative of magnitude of the motion in a predetermined direction of the operator from the motion information received by said receiver device;

a music reproduction control information generating device that generates music reproduction control information for controlling music reproduction of a piece of music, based on the peak information, when a peak value indicated by the peak information is larger than a first predetermined threshold value and a second predetermined threshold value;

an acoustic effect control information generating device that generates acoustic effect control information for controlling at least one acoustic effect to be applied to the

piece of music, based on the peak information, when the peak value indicated by the peak information is larger than the first predetermined threshold value and smaller than the second predetermined threshold value; and

a music data editing device that edits music data of the piece of music based on the music reproduction control information and the acoustic effect control information generated by said music reproduction control information generating device and said acoustic effect control information generating device, respectively.

4. (Original) A music editing apparatus as claimed in claim 3, further comprising:

a locus shape identifying device that identifies a shape of a locus drawn by the operating terminal unit in accordance with the motion of the operator, based on the motion information, when the peak value indicated by the peak information is larger than the first predetermined threshold value and smaller than the second predetermined threshold value; and

a first storage device that stores locus shape information indicative of shapes of loci to be drawn by the operating terminal unit and acoustic effect item information indicative of acoustic effects to be applied to the piece of music, in association with each other; and

wherein said acoustic effect control information generating device searches said first storage device using the shape of the locus identified by said locus shape identifying device, as a retrieval key, to obtain corresponding acoustic effect item information, and then generates the acoustic effect control information for controlling the

acoustic effect indicated by the obtained acoustic effect item information, based on the peak information.

5. (Original) A music editing apparatus as claimed in claim 4, wherein said locus shape identifying device identifies not only the shape of the locus drawn by the operating terminal unit in accordance with the motion of the operator, but also a direction of the locus, based on the motion information,

wherein said first storage device stores the locus shape information, locus direction information indicative of directions of the loci, and the acoustic effect item information, in association with each other, and

wherein said acoustic effect control information generating device searches said first storage device using the shape of the locus and the direction of the locus identified by said locus shape identifying device, as retrieval keys, to obtain the corresponding acoustic effect item information from the stored acoustic effect item information, and then generates the acoustic effect control information for controlling the acoustic effect indicated by the obtained acoustic effect item information, based on the peak information.

6. (Original) A music editing apparatus as claimed in claim 4, further comprising a second storage device that stores peaks values of the peak information and acoustic effect level values indicative of magnitude of each of acoustic effects to be applied to the piece of music, in association with each other, and

wherein said acoustic effect control information generating device searches said second storage device using the peak information detected by said detector device, as a retrieval key, to obtain a corresponding acoustic effect level value from the stored

acoustic effect level values, and searches said first storage device using the shape of the locus and the direction of the locus identified by said locus shape identifying device, as retrieval keys, to obtain the corresponding acoustic effect item information from the stored acoustic effect item information, and then generates the acoustic effect control information based on the obtained acoustic effect level value and the obtained acoustic effect item information.

7. (Currently Amended) A music editing terminal unit comprising:

a motion information generating device that can be carried by an operator, and generates motion information in response to motion of the operator;

a music editing device that edits music data of a piece of music to be reproduced based on the motion information generated by said motion information generating device;

a detector device that detects peak information indicative of magnitude of the motion in a predetermined direction of the operator from the motion information; and

a control information generating device that generates music reproduction control information for controlling music reproduction of the piece of music, based on the peak information, when a peak value indicated by the peak information is larger than a first predetermined threshold value and a second predetermined threshold value, and generates acoustic effect control information for controlling at least one acoustic effect to be applied to the piece of music, based on the peak information, when the peak value indicated by the peak information is larger than the first predetermined threshold value and smaller than the second predetermined threshold value,

wherein said music editing device edits the music data based on the music reproduction control information and the acoustic effect control information generated by said control information generating device.

8. (Currently Amended) A music reproduction terminal unit comprising:
a motion information generating device that can be carried by an operator, and generates motion information in response to motion of the operator;

a music editing device that edits music data of a piece of music to be reproduced based on the motion information generated by said motion information generating device;

a detector device that detects peak information indicative of magnitude of the motion in a predetermined direction of the operator from the motion information; and

a control information generating device that generates music reproduction control information for controlling music reproduction of the piece of music, based on the peak information, when a peak value indicated by the peak information is larger than a first predetermined threshold value and a second predetermined threshold value, and generates acoustic effect control information for controlling at least one acoustic effect to be applied to the piece of music, based on the peak information, when the peak value indicated by the peak information is larger than the first predetermined threshold value and smaller than the second predetermined threshold value,,

wherein said music data editing device edits the music data based on the music reproduction control information and the acoustic effect control information generated by said control information generating device, and outputs the edited music data to said musical tone generating device.

9. (Currently Amended) A method of controlling a music editing apparatus that edits music data of a piece of music to be reproduced, comprising the steps of:

receiving, from an operating terminal unit that can be carried by an operator, motion information generated in response to motion of the operator carrying the operating terminal unit;

detecting peak information indicative of magnitude of the motion in a predetermined direction of the operator from the received motion information;

generating music reproduction control information for controlling music reproduction of the piece of music, based on the peak information, when a peak value indicated by the peak information is larger than a first predetermined threshold value and a second predetermined threshold value;

generating acoustic effect control information for controlling at least one acoustic effect to be applied to the piece of music, based on the peak information, when the peak value indicated by the peak information is larger than the first predetermined threshold value and smaller than the second predetermined threshold value; and

editing the music data based on the generated music reproduction control information and the generated acoustic effect control information.

10. (Currently Amended) A program for causing a computer to execute a method of controlling a music editing apparatus that edits music data of a piece of music to be reproduced,

the program comprising:

a module for receiving, from an operating terminal unit that can be carried by an operator, motion information generated in response to motion of the operator carrying the operating terminal unit;

a module for detecting peak information indicative of magnitude of the motion in a predetermined direction of the operator from the received motion information;

a module for generating music reproduction control information for controlling music reproduction of the piece of music, based on the peak information, when a peak value indicated by the peak information is larger than a first predetermined threshold value and a second predetermined threshold value;

a module for generating acoustic effect control information for controlling at least one acoustic effect to be applied to the piece of music, based on the peak information, when the peak value indicated by the peak information is larger than the first predetermined threshold value and smaller than the second predetermined threshold value; and

a module for editing the music data based on the generated music reproduction control information and the generated acoustic effect control information.

11. (New) A music editing apparatus as claimed in claim 4, further comprising:

a receiver device that receives, from an operating terminal unit that can be carried by an operator, motion information generated in response to motion of the operator carrying the operating terminal unit;

a detector device that detects peak information indicative of magnitude of the motion in a predetermined direction of the operator from the motion information received by said receiver device;

a music reproduction control information generating device that generates music reproduction control information for controlling music reproduction of a piece of music, based on the peak information, when a peak value indicated by the peak information is larger than a first predetermined threshold value and a second predetermined threshold value;

an acoustic effect control information generating device that generates acoustic effect control information for controlling at least one acoustic effect to be applied to the piece of music, based on the peak information, when the peak value indicated by the peak information is larger than the first predetermined threshold value and smaller than the second predetermined threshold value;

a music data editing device that edits music data of the piece of music based on the music reproduction control information and the acoustic effect control information generated by said music reproduction control information generating device and said acoustic effect control information generating device, respectively; and

a locus shape identifying device that identifies a shape of a locus drawn by the operating terminal unit in accordance with the motion of the operator, based on the motion information, when the peak value indicated by the peak information is larger than the first predetermined threshold value and smaller than the second predetermined threshold value; and

a first storage device that stores locus shape information indicative of shapes of loci to be drawn by the operating terminal unit and acoustic effect item information indicative of acoustic effects to be applied to the piece of music, in association with each other; and

wherein said acoustic effect control information generating device searches said first storage device using the shape of the locus identified by said locus shape identifying device, as a retrieval key, to obtain corresponding acoustic effect item information, and then generates the acoustic effect control information for controlling the acoustic effect indicated by the obtained acoustic effect item information, based on the peak information.

12. (New) A music editing apparatus as claimed in claim 11, wherein said locus shape identifying device identifies not only the shape of the locus drawn by the operating terminal unit in accordance with the motion of the operator, but also a direction of the locus, based on the motion information,

wherein said first storage device stores the locus shape information, locus direction information indicative of directions of the loci, and the acoustic effect item information, in association with each other, and

wherein said acoustic effect control information generating device searches said first storage device using the shape of the locus and the direction of the locus identified by said locus shape identifying device, as retrieval keys, to obtain the corresponding acoustic effect item information from the stored acoustic effect item information, and then generates the acoustic effect control information for controlling the acoustic effect

indicated by the obtained acoustic effect item information, based on the peak information.

13. (New) A music editing apparatus as claimed in claim 11, further comprising a second storage device that stores peaks values of the peak information and acoustic effect level values indicative of magnitude of each of acoustic effects to be applied to the piece of music, in association with each other, and

wherein said acoustic effect control information generating device searches said second storage device using the peak information detected by said detector device, as a retrieval key, to obtain a corresponding acoustic effect level value from the stored acoustic effect level values, and searches said first storage device using the shape of the locus and the direction of the locus identified by said locus shape identifying device, as retrieval keys, to obtain the corresponding acoustic effect item information from the stored acoustic effect item information, and then generates the acoustic effect control information based on the obtained acoustic effect level value and the obtained acoustic effect item information.